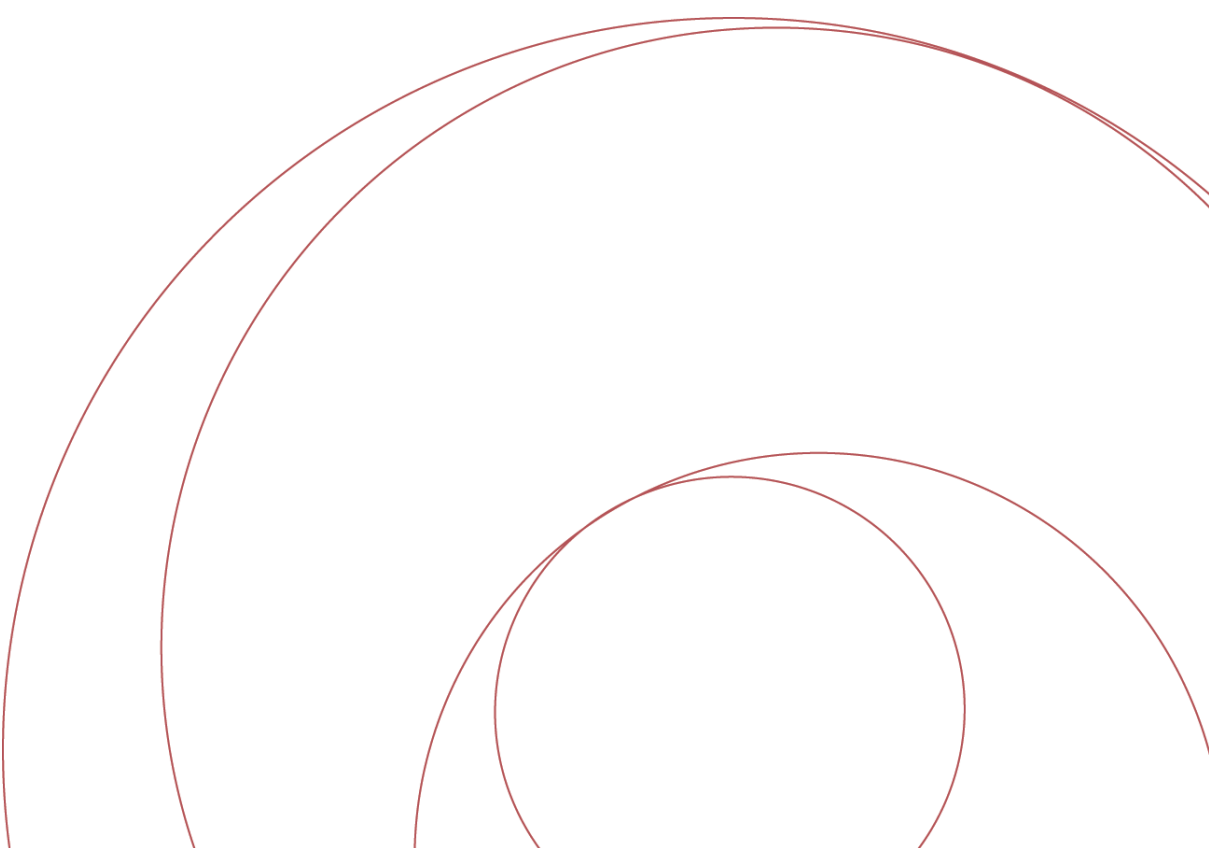


Health Status



IV. HEALTH STATUS

This section focuses on selected indicators of health status for Wisconsin racial/ethnic minority populations. Nine broad areas of health status are addressed:

- Perceptions of health status
- Mortality
- Maternal and child health
- Chronic diseases
- Unintentional and intentional injury
- Communicable diseases
- Environmental health
- Mental health
- Oral health

The availability of data in this section differs according to the health area addressed, and data issues specific to particular topic areas are discussed throughout the section.

A. Perceived Health Status

Self-reported health status is strongly related to individual health outcomes. Persons who are poor and those who are uninsured are more likely to report being in fair or poor health.¹ Persons reporting fair or poor health have higher rates of hospitalization and mortality compared to persons who report excellent to good health.^{1,2}

The burden of morbidity, mortality, and adverse health conditions takes a toll on the health status of minority group members, and members of racial and ethnic minority groups are more likely than whites to report their health status as fair to poor. However, many individuals in minority populations exhibit good health and demonstrate resilience amidst challenging social, economic, and health conditions that affect communities at-large. Cultural traditions, extended familial ties, social support, and community self-reliance are assets that can contribute to health and well-being.

- Based on results from the statewide Wisconsin Family Health Survey, most residents, including racial and ethnic minorities, rated their overall health as good to excellent.
- African Americans and American Indians were less likely to report their health as excellent (27% and 26%, respectively) compared to 34% whites.
- Compared to the Asian and white populations, a larger proportion of African Americans, American Indians, and Hispanics/Latinos identified their health as fair or poor. For the period 1996–2000, an estimated 16% of African Americans, American Indians, and Hispanics/Latinos rated their health as fair or poor compared to an estimated 7% of Asians and 9% of non-Hispanic whites.

Table 22: Perceived health status by race/ethnicity, Wisconsin, 1996–2000

All Ages	African American/ Black	American Indian	Asian	Hispanic/ Latino	White	All Wisconsin
Sample size	<i>n</i> =3,941	<i>n</i> =390	<i>n</i> =432	<i>n</i> =889	<i>n</i> =29,445	<i>n</i> =35,652
	% (C.I. ±)	% (C.I. ±)	% (C.I. ±)	% (C.I. ±)	% (C.I. ±)	% (C.I. ±)
Excellent	27% (1)	26% (4)	30% (4)	31% (3)	34% (1)	34% (--)
Very good	27% (1)	35% (5)	34% (4)	26% (3)	36% (1)	35% (--)
Good	29% (1)	23% (4)	29% (4)	27% (3)	21% (--)	21% (--)
Fair or poor	16% (1)	16% (4)	7% (2)	16% (3)	9% (--)	10% (--)

Source: Wisconsin Family Health Survey, 1996–2000, Wisconsin Department of Health and Family Services, Bureau of Health Information.

Notes: C.I.± refers to the confidence interval range within which there is a 95% chance that the true value lies. Add or subtract the C.I. value (in parentheses) to the percentage estimate to get the upper or lower limits of the 95% confidence interval, rounded to the nearest whole number.

(--) indicates C.I. = 0.5% or less.

Notes

1. Wisconsin Department of Health and Family Services, Division of Health Care Financing, Bureau of Health Information. *Wisconsin Family Health Survey 2000* (PHC 5321). 2002. p. 5.
2. Wolinsky FD, Johnson RJ. Perceived health status and mortality among older men and women. *Journal of Gerontology*. 1992;47:S304.



IV. Health Status

B. Mortality

When and why people die is not the same for all racial and ethnic groups. Mortality reflects a range of health, demographic, social, and economic factors that may interact in different ways for different groups. The higher proportions of young people in Wisconsin's minority populations result in proportionately more deaths from causes that occur at younger ages, such as injuries. More importantly, within specific age groups, racial/ethnic minority populations experience different risks of dying. For African Americans, the risk of dying is greater than that for whites at every age interval.

Each of the 11 health priorities in *Healthiest Wisconsin 2010* relates directly or indirectly to mortality. The health priorities bring attention to the underlying causes of mortality that differ by age. For example, heart disease and cancer, the most frequent causes of death among all racial/ethnic groups at older ages, are influenced by tobacco use and physical activity.

Health priorities of intentional and unintentional injuries constitute major causes of death during adolescence and early adulthood; these account for relatively high proportions of deaths among African Americans, American Indians, Hispanics, and Asians. Alcohol use often contributes to motor vehicle crashes that result in unintentional injury deaths, but it is also a factor in liver disease as a cause of death.

Other health priorities, including adequate nutrition, access to primary health services, and high risk sexual behavior, bring attention to factors that influence birth outcomes. These are especially relevant for addressing high infant mortality in the African American, American Indian, and Hispanic/Latino populations.

The reporting of deaths is required by state law. While nearly all deaths are reported, the accuracy and completeness of information on death certificates varies considerably. Because some misclassification of race and Hispanic origin occurs on death certificates, mortality data should be interpreted with caution. National studies have found inconsistencies in reporting of race and Hispanic origin between death certificates and the population census. The net effect of this misclassification is that deaths and death rates are likely to be underestimated for American Indians, Asians, and to a lesser extent African Americans and Hispanics.¹

The relatively small size of some racial and ethnic groups in Wisconsin also suggests caution in interpreting some of the information that follows. The aggregation of several years of death provides some increase in the actual numbers observed, but these numbers may still be quite small for selected causes of death within a given age interval, particularly for Asians and American Indians.

Reported data in this section reflect reported events within the limitations of death certificate reporting for accuracy of cause of death and race/ethnicity classifications. However, caution is advised in interpreting very small numbers to reflect current and future mortality risks.

Mortality Disparity Ratios

This report measures a health disparity as a statistically significant difference in the rate between a racial/ethnic minority population group and the white population. This measure is referred to as a "disparity ratio." Significant differences in death rates exist between Wisconsin's racial/ethnic minority populations and the white population. Disparity ratios, shown in Table 23, summarize these differences through comparison of minority group-specific rates to the white rates.

A disparity ratio is obtained by dividing the rate of death in a minority population by the rate of death in the white population. For example, the black infant mortality rate (16.3) divided by the white infant mortality rate (5.7) is equal to a rate ratio of 2.86 (16.3 divided by 5.7 = 2.86). Thus, black infant mortality is 2.86 times greater than white infant mortality, indicating a significant disparity.

A disparity ratio equal to 1 indicates no significant difference between the minority and white rates. A disparity ratio greater than 1 indicates a higher minority group rate compared to the white rate; a disparity ratio less than 1 indicates a lower minority group rate compared to the white rate. For all rate ratios shown in this report, tests were done to determine if the ratios were statistically significant. Differences that were not statistically significant are noted by an asterisk (*) next to the value.

The disparity ratio tables in this report illustrate a general pattern of low disparity ratios for Asians and Hispanics and high disparity ratios for African Americans and American Indians. These disparity ratios were calculated using available mortality data that are based on aggregated population groups. The data do not reveal disparities that may be gleaned from an analysis of the health status of subpopulation groups. For example, a separate analysis of mortality among Hmong and other Southeast Asians may reveal potentially higher disparity ratios for these groups than for the total Asian population as shown.

Table 23 and the disparity ratio tables in Appendix III provide more detailed data on mortality disparities between racial/ethnic minority populations and the white population.

- For all ages combined, Wisconsin death rates were higher for African Americans and American Indians compared to the white population. Asians and Hispanics/Latinos had lower death rates than the white population.
- At every age group shown, African Americans had significantly higher death rates than the white population.
- Death rates were higher for American Indians than whites at most ages, with differences at ages 1 to 14 and 75+ not reaching statistical significance.
- Age-specific Asian death rates were significantly lower than white death rates only at ages 45 and over, which accounted for the overall lower Asian death rates. At younger ages, notable differences did not exist between the Asian and the white rates.
- Hispanic death rates were significantly lower than white death rates only at ages 25 and above. In contrast, the Hispanic infant death rate exceeded the white infant death rate.

IV. Health Status

Table 23: Mortality disparity ratios by race/ethnicity and age, Wisconsin, 1996–2000

Age group	African American/ Black	American Indian	Asian	Hispanic/ Latino	White
	Rate ratio	Rate ratio	Rate ratio	Rate ratio	Reference rate
infant (<1 year)	2.86	1.57	0.95*	1.49	5.7 per 1,000 live births
1 to 14 years	2.23	1.48*	1.31*	0.96*	20.4 per 100,000 persons
15 to 24 years	2.17	2.25	1.01*	1.02*	66 per 100,000 persons
25 to 44 years	2.51	2.03	0.86*	0.70	114 per 100,000 persons
45 to 64 years	2.01	2.03	0.64	0.55	542 per 100,000 persons
65 to 74 years	1.54	1.77	0.60	0.52	2,328 per 100,000 persons
75+ years	1.09	1.04*	0.62	0.29	8,326 per 100,000 persons
All ages [†]	1.41	1.38	0.64	0.41	832 per 100,000 persons

Source: Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Notes: *Indicates the disparity ratio is not statistically significantly different than 1.00. That is, taking into account differences in population size, the rate is not statistically significantly different than the white mortality rate (Appendix III, Table R14).

[†] All ages rates are age-adjusted to U.S. year 2000 standard population.

Age-Adjusted Mortality

Figure 8 depicts age-adjusted death rates for all causes for racial and ethnic groups. These rates are estimates of what the death rates for each group would be if each group had the same age distribution as the U.S. year 2000 standard population. Age-adjusted rates are commonly estimated when the age distributions of the groups being compared are substantially different. However, using the age-adjusted rates to estimate degree of disparities among groups can be misleading when the level of disparity depends on age.

National Findings

- Nationally, the total age-adjusted mortality rate for all causes was higher than the Wisconsin rate (884 deaths per 100,000 in the U.S. compared with 841 deaths per 100,000 in Wisconsin). Mortality rates in Wisconsin were lower than the national rates only among Hispanics/Latinos and whites.
- Age-adjusted mortality of American Indians was considerably higher in Wisconsin (1,145 deaths per 100,000) than nationally (706 per 100,000).
- In Wisconsin, whites and Hispanics had age-adjusted death rates for the period 1996–2000 that were lower than the respective national average rates for these groups. Reasons for the large difference between the national and Wisconsin Hispanic age-adjusted death rate are not well understood, but the pattern of lower death among Wisconsin Hispanics compared to Hispanics nationwide repeats for several specific causes of death.

Table 24: Average annual age-adjusted death rates from all causes by race/ethnicity, U.S. and Wisconsin, 1996–2000

	African American/ Black	American Indian	Asian	Hispanic/ Latino	White	Total
United States	1,151	706	523	606	870	884
Wisconsin	1,165	1,145	529	337	832	841

Source: U.S. calculations are from *Health, United States, 2003 with Chartbook*. Wisconsin data are from Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.

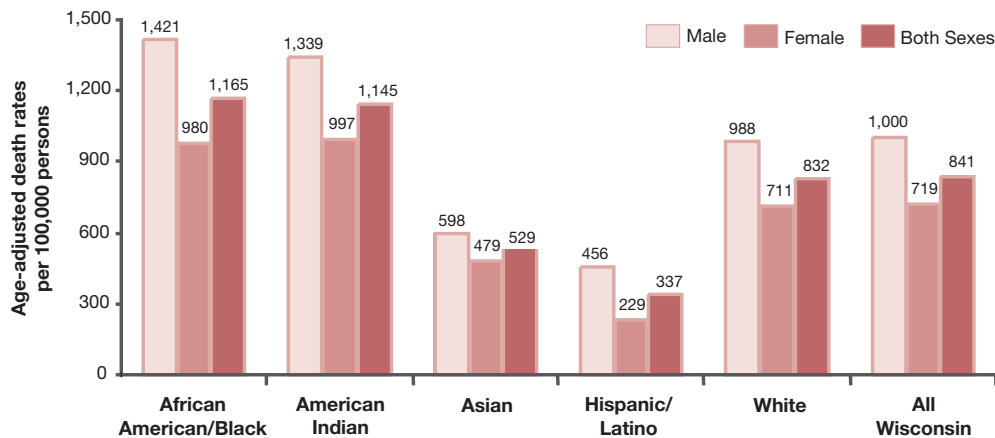
Note: Rates are on an annual basis per 100,000 based on the U.S. year 2000 standard population.

Wisconsin Findings

- During 1996–2000 in Wisconsin, African Americans and American Indians had the highest overall age-adjusted death rates and Asians and Hispanics/Latinos had the lowest overall age-adjusted death rates compared to other racial/ethnic groups.
- During 1996–2000, an average of 1,165 Wisconsin African American deaths occurred annually per 100,000 population. In comparison, the white rate was 832 deaths per 100,000. Thus, the risk of an African American death was 1.4 times that of a white death.²
- In contrast to the national pattern of mortality by racial/ethnic group, American Indians in Wisconsin had age-adjusted death rates (1,145 deaths per 100,000) that exceeded the white rate (832 per 100,000).
- The state's age-adjusted death rate for Hispanics (337 deaths per 100,000) was below that of Asians (529 per 100,000).
- In every racial/ethnic group, male death rates exceed the female rates. The largest gender discrepancy was among Hispanics where the male age-adjusted death rate (456 deaths per 100,000) was twice the female rate (229 per 100,000).
- Among males, the relative pattern of age-adjusted death was similar to the overall state pattern. African American males had the highest age-adjusted death rate (1,421 deaths per 100,000), followed by American Indians (1,329 per 100,000), whites (988 per 100,000), and Asians (598 per 100,000). The lowest male death rate was among Hispanics (456 per 100,000).
- Among women, the risk of death based on age-adjusted death rates was higher for African Americans (980 per 100,000) and American Indians (997 per 100,000) than whites (711 per 100,000); rates were lower for Asian and Hispanic females (479 and 229 per 100,000, respectively) compared to white females. American Indians had the highest age-adjusted death rate among women in Wisconsin.

IV. Health Status

Figure 8: Average annual age-adjusted death rates by race/ethnicity and sex, Wisconsin, 1996–2000



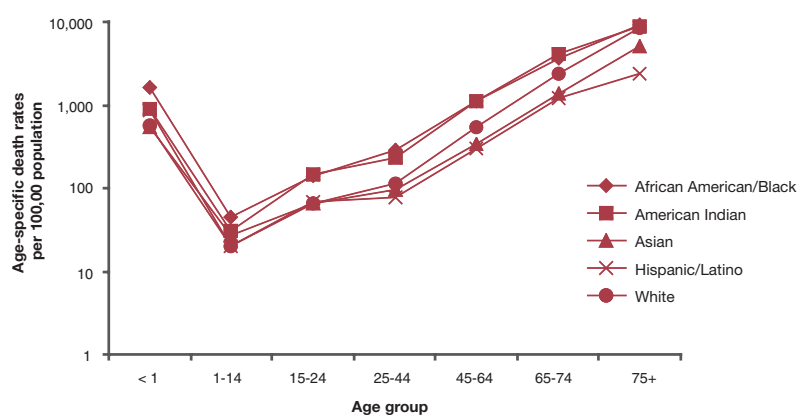
Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Age-Specific Mortality

For all racial/ethnic minority populations and for whites, mortality by age follows an asymmetrical U-shaped curve. After the first year of life, the risk of death drops; it then follows an upward trend with death rates increasing with advancing age.

- Highest mortality rates occur in all groups at the oldest ages. Figure 9 illustrates this pattern for Wisconsin with average annual rates for 1996–2000 by racial/ethnic groups.
- At every age, African American and American Indian mortality rates were the highest. After early adulthood, lowest age-specific mortality rates were among Asians and Hispanics. Age-specific rates are provided in Appendix III, Table R13, by race/ethnicity and sex.

Figure 9: Average annual age-specific death rates by race/ethnicity, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Division of Public Health.

Note: Death rates shown for age group < 1 are infant deaths per 100,000 live births; this contrasts with the infant mortality rate that is per 1,000 live births.

IV. Health Status

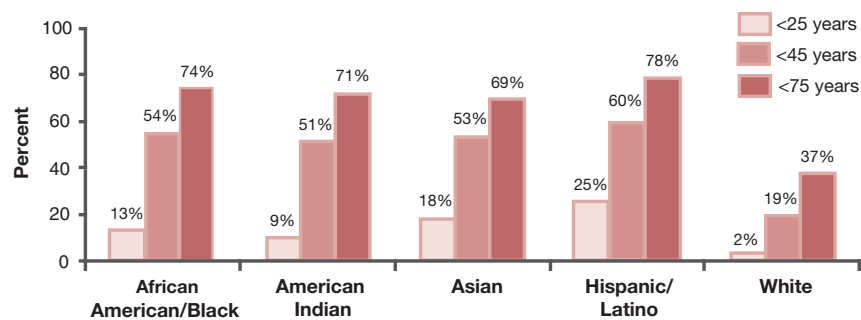
Age-Specific Distribution of Deaths

Differences in the age structure of racial/ethnic populations in combination with different age-specific probabilities of death result in divergent demographic profiles of mortality. For the white population, mortality is largely an experience of old age.

African American, American Indian, Hispanic, and Asian populations all have smaller proportions of older people than the white population. This contributes to racial and ethnic populations having a greater proportion of deaths concentrated at younger ages. Figure 10 illustrates for the combined years 1996–2000 the proportion of deaths that occurred in Wisconsin by selected age intervals.

- For all racial and ethnic minority populations, half or more of the deaths in a given year occurred among people younger than the age of 45.
- In contrast, among the white population just 19% of deaths in a given year were among those under the age of 45.

Figure 10: Cumulative proportion of all deaths occurring before selected age intervals by race/ethnicity, Wisconsin, 1996–2000



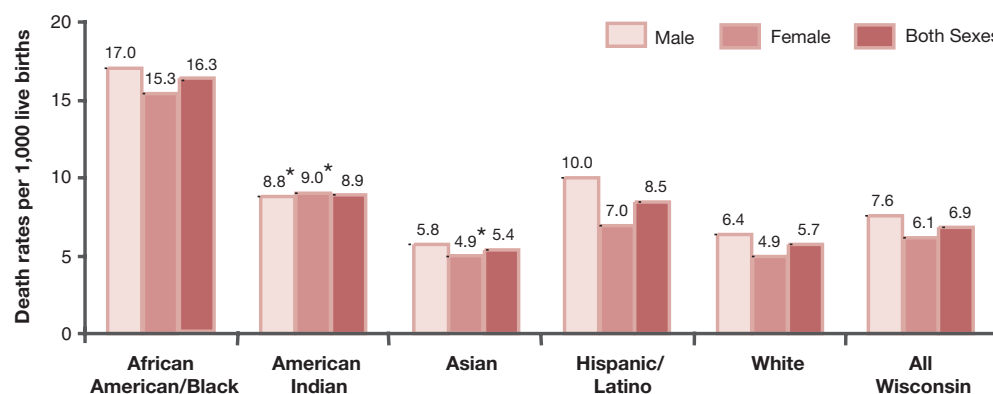
Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Division of Public Health.

Age-Specific Death Rates

Infants (Aged 0 to 1)

- During the period 1996–2000, on average, 104 infants born to Wisconsin African American women died each year during the first year of life (see Appendix III, Table R13). The African American infant death rate of 16.3 deaths per 1,000 live births was almost 3 times the rate for infants born to white women (5.7 deaths per 1,000 live births). No appreciable decline occurred in Wisconsin during the last two decades in either the African American infant mortality rate or the magnitude of the difference between it and the white rate (see Figure 26).
- American Indians and Hispanics also experienced annual infant death rates (8.9 and 8.5 deaths per 1,000 live births, respectively) in Wisconsin that were significantly above the white rate (5.7 deaths per 1,000 live births) during the 1996–2000 period. American Indian and Hispanic infant death rates were about 1.5 times higher than the white rate.
- In contrast to African Americans, American Indian infant mortality showed some decline in the last two decades. Annual American Indian infant mortality averaged over 20 deaths per 1,000 live births for the combined years 1980–1984 and declined to less than 10 deaths per 1,000 live births during the 1996–2000 period (see Figure 26).
- Asian infant mortality, with 5.4 deaths per 1,000 live births, was not significantly different from white infant mortality.

Figure 11: Average annual death rates by race/ethnicity and sex, infants (<1 year), Wisconsin, 1996–2000



Source: Wisconsin resident birth certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

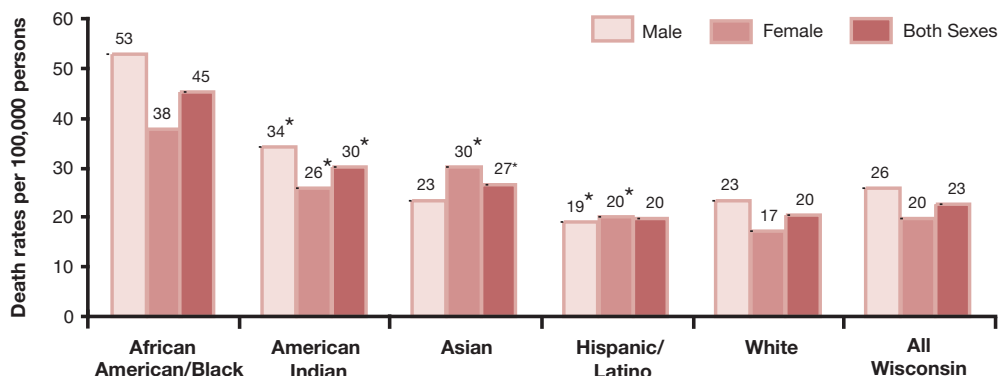
Note: *Rate is based on an average of fewer than 5 deaths.

IV. Health Status

Children and Young Adults (Aged 1 to 14 and 15 to 25)

- The average yearly number of deaths in Wisconsin from 1996–2000 for youths aged 1 to 14 was as follows: African Americans, 39; American Indians, 4; Asians, 7; Hispanic/Latino, 9; white, 177. Among young adults aged 15 to 25, the average number of deaths was: African Americans, 74; American Indians, 12; Asians, 10; Hispanic/Latino, 19; whites, 423 (Appendix III, Table R13).
- In every racial and ethnic group, the lowest age-specific death rates were in the age group 1 to 14 years (Figure 9). Death rates for youths aged 1 to 14 were highest among African Americans.
- At ages 15 to 24, death rates among African Americans (143 per 100,000) and American Indians (148 per 100,000) were more than twice the white rate (66 per 100,000).

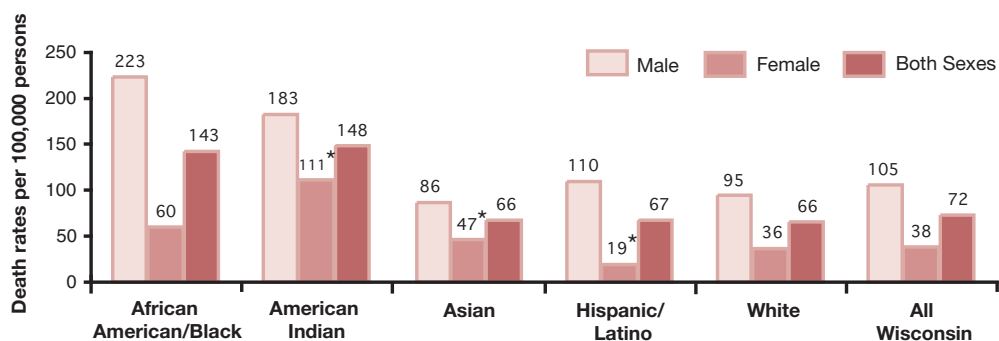
Figure 12: Average annual death rates by race/ethnicity and sex, ages 1 to 14 years, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Note: *Rate is based on an average of fewer than 5 deaths.

Figure 13: Average annual death rates by race/ethnicity and sex, ages 15 to 24 years, Wisconsin, 1996–2000



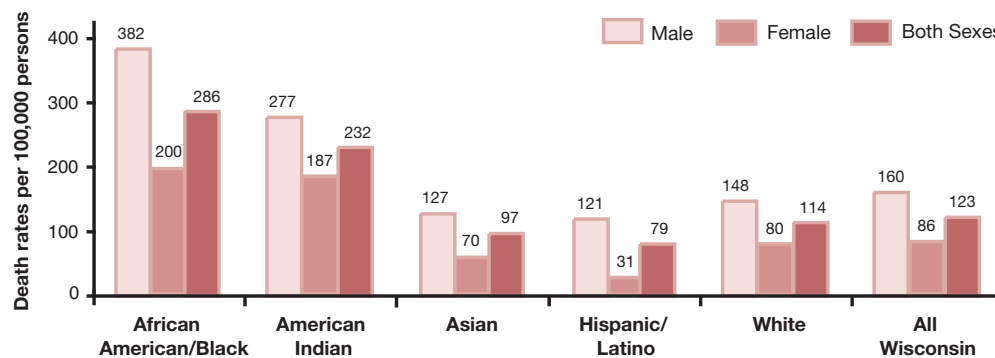
Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Note: *Rate is based on an average of fewer than 5 deaths.

Adults (Aged 25 to 44 and 45 to 64)

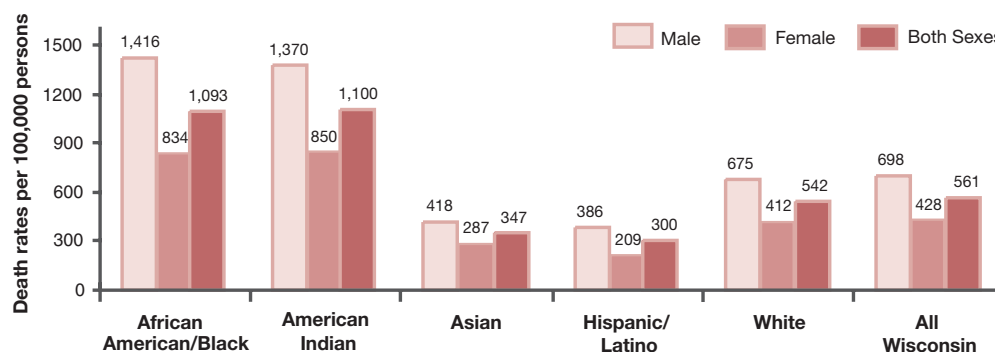
- By the age interval of 25 to 44, the upward climb in mortality that continues through older ages has begun. In the period 1996–2000, the annual number of deaths in the 25 to 44 year age group was as follows: African Americans, 250; American Indians, 32; Asians, 22; Hispanic/Latino, 35; white, 1,611 (Appendix III, Table R13).
- Among African Americans and American Indians, deaths in the age intervals of 25 to 44 and 45 to 64 resulted in death rates that were about two or more times greater than the white rate. The lowest death rates were among Hispanics/Latinos. At ages 25 to 44, the Asian rate did not differ significantly from the white rate, but it was significantly lower at ages 45 to 64.
- Up to age 64, age-specific death rates among African Americans were at least 2 times those of whites. However, after age 25, with each successively older age interval, the magnitude of the disparity between African American and white age-specific death rates decreased.

Figure 14: Average annual death rates by race/ethnicity and sex, ages 25 to 44 years, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Figure 15: Average annual death rates by race/ethnicity and sex, ages 45 to 64 years, Wisconsin, 1996–2000



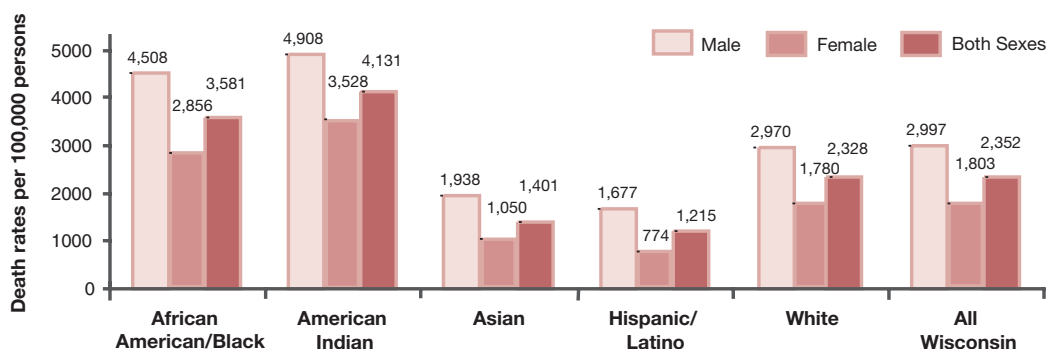
Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

IV. Health Status

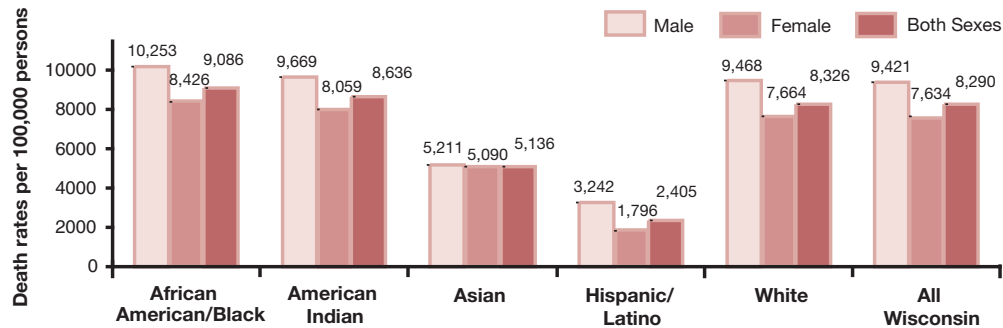
Older Adults (Aged 65 to 74 and 75+)

- For the period 1996–2000 in Wisconsin, the average annual number of deaths at ages 65 to 74 and 75+ were the following: African Americans, 333 and 450 deaths, respectively; American Indians, 52 and 73; Asians, 25 and 50; Hispanic/Latino, 42 and 53; and whites, 7,906 and 27,332 (Appendix III, Table R13).
- As with younger age groups, the highest death rates were among African Americans and American Indians. Even though the gap in the mortality rates between these groups and whites was considerably less than at younger ages, at ages 65 to 74, the African American death rate was still 1.5 times greater than the white rate; the American Indian rate was 1.8 times greater than the white rate.
- By age 75 and over, the discrepancy between the African American and white rate had declined considerably. Yet even at this oldest age interval, the African American death rate exceeded that for whites, which contrasts with national patterns where African American mortality tends to drop below that of whites at the oldest ages.³
- At both age intervals, 65 to 74 and 75+, Asians and Hispanics/Latinos had death rates that were well below the comparable white rates.

Figure 16: Average annual death rates by race/ethnicity and sex, ages 65 to 74 years, Wisconsin, 1996–2000



Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information. Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Figure 17: Average annual death rates by race/ethnicity and sex, ages 75 years and older, Wisconsin, 1996–2000

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
Graph prepared by the Wisconsin Public Health and Health Policy Institute, University of Wisconsin-Madison.

Years of Potential Life Lost

The measurement Years of Potential Life Lost (YPLL) represents one approach to quantify the burden of mortality that occurs before an average age at death. YPLL defines a death before age 75 as premature mortality and uses the number of years between the age of death and age 75 to indicate years of life lost prematurely.⁴

- Table 25 indicates that the African American population in Wisconsin lost an average of 127 years of life before age 75 for every 1,000 persons. This is about twice the years of lost life by whites, which was 65 years per 1,000 persons.
- Premature mortality, as measured by years of potential life lost, accounted for 106 years for every 1,000 American Indians.
- The number of years of potential life lost per 1,000 population by Asians and Hispanics were 45 and 47, respectively.

Table 25: Years of potential life lost (YPLL) before age 75 by race/ethnicity, Wisconsin, 1996–2000

	African American/Black	American Indian	Asian	Hispanic/Latino	White
YPLL per 1,000 population (Crude)	127	106	45	47	65

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.
YPLL calculations prepared by the Wisconsin Division of Public Health.

Note: See Appendix II, Technical Notes for details on calculations of YPLL.

IV. Health Status

Leading Causes of Death

All Wisconsin

- Heart disease and cancer constitute the two leading causes of death statewide and in all of the racial/ethnic groups addressed in this report.
- Heart disease, cancer, and stroke represented 61% of all Wisconsin deaths between 1996 and 2000.
- Among racial/ethnic populations, the above-mentioned chronic health conditions represented a smaller portion of all deaths, in part due to their higher proportions of younger people in their populations where other causes of death, such as injury, occur more frequently.
- Correspondingly, injuries and other causes of death more frequent at younger ages were often more highly ranked than stroke in racial/ethnic minority groups.

Table 26: Leading causes of death, average annual number of deaths by sex, Wisconsin, 1996–2000

Rank	Both sexes			Male			Female		
	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths
1	heart disease	13,730	30%	heart disease	6,964	31%	heart disease	6,990	30%
2	cancer	10,526	23%	cancer	5,616	25%	cancer	5,126	22%
3	stroke	3,661	8%	stroke	1,348	6%	stroke	2,330	10%
4	chronic lung disease	2,288	5%	unintentional injury	1,123	5%	chronic lung disease	932	4%
5	unintentional injury	1,831	4%	chronic lung disease	1,123	5%	influenza/pneumonia	932	4%
6	influenza/pneumonia	1,373	3%	influenza/pneumonia	674	3%	Unintentional injury	699	3%
7	diabetes	1,373	3%	diabetes	674	3%	diabetes	699	3%
8	Alzheimer's disease	915	2%	suicide	449	2%	Alzheimer's disease	466	2%
9	kidney disease	458	1%	kidney disease	225	1%	anemias	466	2%
10	suicide	458	1%	liver disease	225	1%	kidney disease	233	1%
Total	All causes	45,767		All causes	22,465		All causes	23,301	

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.

Notes: The number of cause-specific deaths may not add to the total due to rounding since numbers reflect an annual average based on the sum of deaths from 1996–2000 divided by 5.

% of deaths is the percent of all deaths in the population or gender group due to the specified cause.

African Americans

- On average, 1,700 African Americans died each year between 1996 and 2000. More than half (54%) of these deaths were before age 65. By comparison, less than 20% of deaths among whites were before age 65.
- Forty-five percent of all African American deaths were from heart disease or cancer, compared with 53% statewide and 54% among whites. These were the two leading causes of African American deaths at age 45 and over.
- Similar to the white population, stroke was the third-ranked cause of death among African Americans in Wisconsin. However, among African American men, more deaths were from homicide or unintentional injury than stroke.
- Homicide and unintentional injury were the two leading causes of death among African American men for the age groups 1 to 14, 15 to 24, and 25 to 44. Homicide was the first-ranked cause of death for the ages 15 to 24 and 25 to 44; it accounted for 58% of deaths between the ages of 15 and 24 and 23% of deaths between the ages 25 to 44 (Appendix III, Table R8).
- Among African American women for all ages combined, stroke and diabetes ranked respectively as the third and fourth leading causes of death. Younger African American women, similar to African American men, experienced homicide and unintentional injuries as the two leading causes of death at ages 1 to 14 and 15 to 24. From age 45 through the oldest age group (75+), diabetes ranked among the five leading causes of death for African American women (Appendix III, Table R8).

Table 27: Leading causes of death, average annual number of deaths, by sex, African American population, Wisconsin, 1996–2000

Rank	Both sexes			Male			Female		
	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths
1	cancer	390	23%	cancer	215	23%	heart disease	184	23%
2	heart disease	378	22%	heart disease	194	21%	cancer	175	22%
3	stroke	110	6%	homicide	81	9%	stroke	59	8%
4	homicide	99	6%	unintentional injury	61	7%	diabetes	43	5%
5	unintentional injury	85	5%	stroke	51	5%	unintentional injury	25	3%
6	diabetes	68	4%	chronic lung disease	33	4%	perinatal conditions	24	3%
7	chronic lung disease	57	3%	perinatal conditions	31	3%	chronic lung disease	23	3%
8	perinatal conditions	55	3%	diabetes	25	3%	kidney disease	18	2%
9	influenza/pneumonia	35	2%	AIDS/HIV disease	22	2%	homicide	17	2%
10	kidney disease	32	2%	influenza/pneumonia	19	2%	influenza/pneumonia	16	2%
Total	All causes	1,714		All causes	930		All causes	783	

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.

Notes: The number of cause-specific deaths may not add to the total due to rounding since numbers reflect an annual average based on the sum of deaths from 1996–2000 divided by 5.

% of deaths is the percent of all deaths in the population or gender group due to the specified cause.



IV. Health Status

American Indians

- On average, 252 Wisconsin American Indians died each year between 1996 and 2000. Heart disease and cancer were the two leading causes of death, both sexes and by gender. Forty-three percent of all Wisconsin American Indian deaths were due to one of these two causes (24% due to heart disease and 19% due to cancer).
- Heart disease and cancer were the most frequently reported causes of death after age 45. The risk of death from heart disease or cancer, based on age-specific death rates, increased substantially after age 64.
- Unintentional injury was the third leading cause of death among American Indians in the state. On average, 14 men and 11 women died annually from this cause. About two-thirds of unintentional injury deaths occurred in age groups under age 45, and it was the leading cause of male and female death among children (aged 1 to 14), young adults (aged 15 to 24), and adults (aged 25 to 44) (Appendix III, Table R9).
- About 7% of all American Indian deaths were from diabetes, which was the fourth most frequently listed cause of death among both male and female American Indians. In comparison, diabetes ranked seventh as a leading cause of death in Wisconsin's white population. Most deaths from diabetes occurred between the ages of 45 and 74.
- Stroke was the fifth leading cause of death among Wisconsin American Indians (all ages and both sexes combined). Among American Indian men, liver disease accounted for a greater number of deaths than stroke. Liver disease was also a leading cause of death among American Indian women, although less frequent than stroke or chronic lung disease. Liver disease deaths, often resulting from severe alcoholism, caused an average of 7 deaths per year among men and 5 deaths per year among women; most between the ages of 45 and 64.
- Suicide ranked seventh as a leading cause of death among American Indian men, with about 5 deaths annually; it ranked tenth among women with about 3 deaths per year. Most male and female deaths from suicide occurred between the ages of 15 and 44. Between the ages of 15 and 24, suicide accounted for 22% of American Indian deaths; between the ages of 25 and 44, about 13% were from suicide (Appendix III, Table R9). These proportions are similar to those for the white population.

Table 28: Leading causes of death, average annual number of deaths, American Indian population, by sex, Wisconsin, 1996–2000

	Both sexes			Male			Female		
Rank	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths
1	heart disease	60	24%	heart disease	34	26%	heart disease	25	21%
2	cancer	47	19%	cancer	25	19%	cancer	23	19%
3	unintentional injury	24	10%	unintentional injury	14	10%	unintentional injury	11	9%
4	diabetes	19	7%	diabetes	8	6%	diabetes	10	8%
5	stroke	14	5%	liver disease	7	5%	stroke	9	7%
6	liver disease	12	5%	stroke	5	4%	chronic lung disease	6	5%
7	chronic lung disease	9	4%	suicide	5	4%	liver disease	5	4%
8	suicide	7	3%	influenza/pneumonia	4	3%	kidney disease	3	3%
9	influenza/pneumonia	7	3%	chronic lung disease	4	3%	influenza/pneumonia	3	2%
10	kidney disease	5	2%	homicide	3	2%	suicide	3	2%
Total	All causes	252		All causes	132		All causes	120	

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.

Notes: The number of cause-specific deaths may not add to the total due to rounding since numbers reflect an annual average based on the sum of deaths from 1996–2000 divided by 5.

% of deaths is the percent of all deaths in the population or gender group due to the specified cause.

Asians

- During the period 1996–2000, about 157 annual deaths occurred among Wisconsin Asians. Approximately one-quarter (24%) of these deaths were due to cancer, which was the leading cause of death. For Asian men and women, cancer was the most frequently reported cause of death in every age interval from 25 to 74 years (Appendix III, Table R10).
- About 20%, or 31 annual deaths, among Asians were due to heart disease. As a leading cause of death, heart disease ranked fourth in the age interval of 25 to 44; it ranked second at age intervals of 45 to 64 and 65 to 74. At age 75 and over, heart disease was the leading cause of death among Asians (Appendix III, Table R10).
- Together, cancer and heart disease accounted for about 44% of all deaths among Asians in the state; this compares to about 54% of white deaths that were from these causes. The Asian-white difference results from both lower age-specific rates of cancer and heart disease among Asians, as well as the younger average age of the Asian population.

IV. Health Status

- Unintentional injury ranked third as a leading cause of Asian deaths (about 15 deaths per year.) More men (about 10 per year) than women (about 5 per year) of Asian heritage died due to an unintentional injury. Thus, unintentional injury was the third leading cause of death for Asian men; it was the fourth leading cause of death among women, for whom stroke constituted the third leading cause. For both men and women, the highest rate of unintentional injury occurred between the ages of 15 and 24, where 45% of all deaths were from this cause (Appendix III, Table R10).
- Suicide, the fifth leading cause of death among Asians in Wisconsin, represented about 4% of Asian deaths. In the age intervals of 15 to 24 and 25 to 44 years, suicide accounted for more than 10% of Asian deaths (Appendix III, Table R10).
- The five leading causes of death: cancer, heart disease, unintentional injury, stroke, and suicide, accounted for two-thirds of all Asian deaths. Because of the relatively small size of the Asian population and corresponding number of deaths, less frequently reported causes of death resulted from 5 or fewer cases per year. Thus, a difference of one of two cases could result in shifts in the relative rankings.

Table 29: Leading causes of death, average annual number of deaths, by sex, Asian population, Wisconsin, 1996–2000

Both sexes				Male			Female		
Rank	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths
1	cancer	37	24%	cancer	19	23%	cancer	18	24%
2	heart disease	31	20%	heart disease	17	21%	heart disease	14	18%
3	unintentional injury	15	10%	unintentional injury	10	12%	stroke	8	10%
4	stroke	14	9%	stroke	6	7%	unintentional injury	5	7%
5	suicide	6	4%	suicide	4	5%	diabetes	3	4%
6	influenza/pneumonia	4	3%	perinatal conditions	3	3%	influenza/pneumonia	2	3%
7	diabetes	4	3%	congenital malform.	2	3%	suicide	2	3%
8	perinatal conditions	4	3%	influenza/pneumonia	2	2%	chronic lung disease	2	3%
9	congenital malform.	4	3%	homicide	2	2%	congenital malform.	2	2%
10	chronic lung disease	3	2%	chronic lung disease	1	2%	homicide	1	2%
Total	All causes	157		All causes	80		All causes	77	

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.

Notes: The number of cause-specific deaths may not add to the total due to rounding since numbers reflect an annual average based on the sum of deaths from 1996–2000 divided by 5.

% of deaths is the percent of all deaths in the population or gender group due to the specified cause.

Hispanics/Latinos

- An average of 229 deaths per year occurred among Hispanics in Wisconsin during the period 1996–2000. Cancer and heart disease were the two leading causes of death, with an average of 39 deaths per year from cancer and 38 deaths per year from heart disease. Of all Hispanic deaths, 34% were attributed to one or the other of these two causes; by comparison, 54% of all white deaths were due to cancer and heart disease, combined.
- Heart disease was the leading cause of death among Hispanic women, accounting for 15 deaths per year and 20% of all deaths among Hispanic women. More than three-fourths of the reported heart disease deaths in this group were to persons aged 65 and over, while more than half of the Hispanic women who died from cancer were under age 65 (Appendix III, Table R11).
- Among Hispanic men, a slightly higher proportion of deaths were from cancer than heart disease resulting in cancer as the first-ranked cause of death. Among Hispanic men who died from heart disease, 64% were aged 65 and over; 52% who died from cancer were similarly aged.
- High rates of unintentional injury among Hispanic men resulted in this being the third-ranked cause of death among Hispanics. Homicide followed unintentional injury in frequency as a cause of death among Hispanic men. About 30 Hispanic males, adolescents and adults, died per year as a result of unintentional injury or homicide. Deaths from unintentional injury and homicide were concentrated in the age groups 1 to 14, 15 to 24, and 25 to 44 years. In the age interval of 15 to 24 years, more than three-fourths (77%) of Hispanic male deaths were due to unintentional injury and homicide (Appendix III, Table R11).
- Diabetes was the fourth-ranked leading cause of Hispanic deaths. Hispanic age-specific death rates from diabetes exceed those for comparable age groups in the white population. Overall, diabetes accounted for about 6% of annual deaths among Hispanics, compared with 3% among the white population. At ages 65 and over, diabetes was the third leading cause of Hispanic deaths, following heart disease and cancer.
- The relatively high risk of adverse birth outcomes among Hispanics was reflected not only in an infant mortality rate that exceeded the white rate, but also in perinatal conditions and congenital malformations among the ten leading causes of Hispanic death.
- Liver disease and suicide each accounted for about 3% of Hispanic deaths. Deaths from these causes were more frequent among men than women and concentrated in the 25 to 64 age intervals (Appendix III, Table R11).

IV. Health Status

Table 30: Leading causes of death, average annual number of deaths, by sex, Hispanic/Latino population, Wisconsin, 1996–2000

Both sexes				Male			Female		
Rank	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths	Cause	# of deaths	% of deaths
1	cancer	39	17%	cancer	25	16%	heart disease	15	20%
2	heart disease	38	17%	heart disease	23	15%	cancer	13	18%
3	unintentional injury	25	11%	unintentional injury	20	13%	stroke	6	8%
4	diabetes	14	6%	homicide	10	7%	unintentional injury	5	7%
5	homicide	12	5%	diabetes	9	6%	diabetes	5	7%
6	stroke	11	5%	perinatal conditions	7	4%	perinatal conditions	5	6%
7	perinatal conditions	11	5%	liver disease	6	4%	congenital malform.	3	3%
8	liver disease	7	3%	suicide	6	4%	influenza/pneumonia	2	3%
9	suicide	7	3%	stroke	6	4%	homicide	2	2%
10	congenital malform.	6	2%	chronic lung disease	4	3%	liver disease	1	2%
Total	All causes	229		All causes	154		All causes	76	

Source: Wisconsin resident death certificates, Wisconsin Department of Health and Family Services, Bureau of Health Information.

Notes: The number of cause-specific deaths may not add to the total due to rounding since numbers reflect an annual average based on the sum of deaths from 1996–2000 divided by 5.

% of deaths is the percent of all deaths in the population or gender group due to the specified cause.

Notes

1. Hoyert DL, Arias E, Smith BL, Murphy SL, Kochanek, KD. Deaths: final data for 1999. *National Vital Statistics Reports*. 2001;49:91.
2. Appendix III, Table R14 contains disparity ratios of death rates among racial/ethnic groups to the white rates and indicates where statistically significant differences exist.
3. Markides KS, Miranda MR, eds. *Minorities, Aging, and Health*. Thousand Oaks, CA: Sage Publications; 1997.
4. Age 75 is the standard chosen as the upper limit in a number sources including, for example, *Health, United States*, 2002.